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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|--|-------------|---------------------------|---------------------|--------------------|--|--|
| 10/571,995 | 03/15/2006 | Johannes Antonius Craamer | 07054.0006.PCUS00 | 5581 | | |
| 32894 | 7590 | 05/20/2008 | EXAMINER | | | |
| HOWREY LLP C/O IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DR., SUITE 200 FALLS CHURCH, VA 22042 | | | | NGUYEN, KHANH TUAN | | |
| ART UNIT | | PAPER NUMBER | | | | |
| 1796 | | | | | | |
| MAIL DATE | | DELIVERY MODE | | | | |
| 05/20/2008 | | PAPER | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|----------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/571,995 | CRAAMER, JOHANNES ANTONIUS | |
| Examiner | | Art Unit | |
| KHANH T. NGUYEN | | 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 May 2008.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,5-15,18-23,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,5-15,18-23,25 and 26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>none</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, **the finality of that action is withdrawn**.
2. The amendment filed on 11/23/2007 is entered and acknowledged by the Examiner. Claims 1-3, 5-15, 18-23, 25 and 26 are currently pending in the instant application. Claims 4, 6, 16, 17, and 24 have been canceled.
3. The rejection of claims 1-3, 5, 7-15, 18-23, 25 and 26 under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (U.S Pat. 6,120,560) either in view of English Translation of Ishihara et al. (JP Pub. 06-220781) or in view of English Translation of Masuda et al. (JP Pub. 60-157867) is withdrawn in view of Applicant's remarks.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5-15, 18-23, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson (G.B. Pat. 2,187,419 A).

With respect to claims 1-3, 5, 7-15, 18-23, 25 and 26, Dawson discloses (please refer to fig. 1 to fig. 4) a method for upgrading a web or sheet textile article (14) such as woven or tufted material, felt, woven or non-woven textiles, and knitted fabrics (Abstract and Col. 1, lines 5-15 and lines 115-122). Dawson's textile article is considered readable on the claimed cloth because at paragraph [0003] of the specification, cloth is exemplified as woven or knitted fabrics, tufted material or felt and non-woven materials which are the same materials disclosed by Dawson.

Dawson's method uses a patterning device (B, C, D) comprising a plurality of nozzles or capillary jets (17) that is controllable by a computer 30 to digitally control the pattern or design.

Dawson's method comprising of the steps of: a) hand placing (i.e. affixing) the said textile article (14) onto the upper run of the conveyor belt (12) (Col. 2, lines 101-108). Dawson also teaches a desire to produce very sharp defined patterns and designs (i.e. no distortion problem) on fabric sheet (i.e. cloth) with accuracy (Col. 1, lines 103-109; Col. 2, lines 5-12; Col. 3, lines 82-94). Thus, the Examiner considered placing the textile article (14) onto the conveyor belt to meet the claimed limitation of affixing a first textile article 14 to the conveyor belt to substantially prevent relative movement there between that may cause distortion.

The fabric sheet is then conveyed to a predetermined position by a computer program past a first row of nozzles (15 B) wherein the fabric sheet will be treated (Col. 2, lines 7-12), as recited in step b).

Dawson teaches the fabric sheet is printed with liquid medium. Alternative, the surface of the fabric sheet may be surface coated (Col. 1, lines 120-122). The disclosure is readable on step c) performing with the first row (15 B) of nozzles one of the operations of coating of the textile article carried there past.

The coated fabric sheet may then be convey from the first row of nozzles (15 B) past a second row of nozzles (15 C) for a second coating, as recited in steps d) and e). Dawson also teaches the rows of nozzles (15B, 15C, 15D) may contain different colors and may be easily replaced to produce different patterns or designs (Col. 2, lines 113-119). Thus, it is construed that the step of c) or e) for a second fabric sheet may be coated with a different pattern and designs by replacing the colors or re-program the computer to coat different patterns or designs. The disclosure is considered to be capable of repeating steps a) to e) for a second textile article wherein the operation carried out in step c) or e) is different in colors, patterns or designs for the first article than the second article.

The reference specifically or inherently meets each of the claimed limitations in their broadest interpretations. The reference is anticipatory.

Regarding claim 6, Dawson teaches the nozzle may fire a droplet in a range of 2 to 30 milliseconds (Col. 3, lines 126-130). The disclosure is readable on a nozzle generating at least 100,000 droplets per second.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-15, 18-23, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson (G.B. Pat. 2,187,419 A) as applied to the above claims, and further in view of either English Translation of Ishihara et al. (JP Pub. 06-220781) or English Translation of Masuda et al. (JP Pub. 60-157867).

Dawson teaches the features as described above. In addition, Dawson teaches the desire to produce very sharp defined patterns and designs (i.e. distortion free patterns and designs) on fabric sheet (i.e. cloth) by coating or printing method on a continue moveable conveyor belt (Col. 1, lines 103-109; Col. 2, lines 5-12; Col. 3, lines 82-94). In the alternative that the above reference does not anticipate the claimed step a) of affixing a first textile article to a conveyor belt to substantially prevent relative movement there between, the following are relied upon.

In an analogous art, Ishihara teaches a printing method comprises of a step of affixing a fabric 1 (i.e. cloth) to a conveyor belt 3 using a double-sided adhesive sheet 4 to easily obtain a high-quality printed product (i.e. very sharp defined patterns and designs) during the circulatory movement of the endless conveyor belt at high operating efficiency (Abstract).

Masuda teaches a printing method comprises of a step of affixing the cloth 2 to the conveyor belt 3 using a cloth-suction housing 4 wherein the cloth is affix on the conveyor by suction and move along to the array of nozzles 1 to be coated by ink jet system without causing staggering or distortion even when the cloth is flexible and with little blurring of droplets and large penetration depth (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made having the desire to produce a fabric sheet with a very sharp defined patterns and/or designs by a coating or printing method as suggested by Dawson and further affixing the fabric sheet to the conveyor belt with either a double-sided adhesive sheet as suggested by Ishihara or suction as suggested by Masuda to produce a product with very sharp defined patterns and designs. A skilled artisan would have recognized the benefits of either the double-sided adhesive sheet as suggested by Ishihara or suction method as suggested by Masuda as a method for preventing the fabric sheet from shifting while being convey from one nozzle to the other nozzle for coating or printing as taught by Dawson in order to obtain a sharp defined patterns and design (i.e. no distortion problem).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson et al. (G.B Pat. 2,187,419) in view of either English Translation of Ishihara et al. (JP Pub. 06-220781) or English Translation of Masuda et al. (JP Pub. 60-157867) as applied to the above claims, in further view of Teumer (U.S Pat. 4,347,521).

Dawson in view of either Ishihara or Masuda is relied as set forth above.

In the alternative that the above references to not disclose a method having a nozzle that generates at least 100,000 droplets per second, Teumer is relied upon as indicated below.

Teumer discloses a coating method by drop printing system that contains an array of nozzles 18 capable of generating at least from about 100,000 drops per second (dps) to over 200,000 dps (col. 4, lines 57-60).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the method for upgrading textile articles, as taught by Dawson, by incorporating an array of nozzles capable of producing at least 100,000 dps, as taught by Teumer, in order to improve the method for compensating for distortion in a scan or print line of drops due relative motion of the drop generator and target in a printing system having multiple nozzles (Col. 1, lines 53-58).

Response to Arguments

9. Applicant's arguments with respect to claims 1-3, 5-15, 18-23, 25 and 26 have been considered but are moot in view of the new ground(s) of rejection. It is believed that all of the Applicant's arguments have been addressed in the rejections set forth above.

10. In the event that the Applicant would like to request an interview, the Applicant is requested to contact the Examiner and submit an Applicant Initiated Interview Request

form (PTOL-413A) indicating what issues are sought to be discussed before an interview is granted.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1796

/KTN/
05/15/2008